

1 ²⁷
2 25. An interface system as defined in claim ²⁴ wherein said cellular wireless
3 network has a plurality of cells, each having a base station for providing wireless
4 communications to NIUs within each cell and for providing a point to point inter-cell radio
link with other base stations within the network..

1 ²⁸
2 26. An interface system as defined in claim ²⁵ wherein one of the base stations is
3 controlled by a network manager to provide configuration parameters for each of said first
4 one or more and said second one or more interface cards in each of the multi-services switch
in each base station.

1 J C M X 1
1 ²⁹
2 27. An interface system as defined in claim ²⁶ wherein the cellular wireless
network is connected to an asynchronous transfer mode (ATM) network.

1 D C W X 3
1 ³⁰
2 28. An interface system as defined in claim ²⁴ wherein each cell is sub-divided
3 into sectors and each base station has a sectored antenna for communicating with NIUs
located in each sector within the cell.

1 Sub G 2
1 ⁵¹
2 29. An interface system as defined in claim ²⁸ wherein each of said first one or
3 more interface cards and each of said second one or more interface cards communicates with
said sectored antenna via one or more combiners.

1 Sub G 2
1 ³²
2 30. An interface system as define in claim ²⁵ wherein said inter-cell radio link
between respective base stations is in a ring configuration.

1 Sub G 2
1 ³³
2 31. An interface system as defined in claim ²⁵ wherein said inter-cell radio link
between respective base stations is in a mesh configuration.

1 Sub G 2
1 ³⁴
2 32. A base station in a cell of a cellular, wireless communications network for
3 providing wireless, bi-directional communication with network interface units (NIUs)
4 within the cell and for providing a point to point inter-cell radio link with a base station in a
5 neighboring cell, the base station having a multi-services switch equipped with a first radio
interface card for providing the wireless, bi-directional communication between the base

6 station and the NIUs and a second interface card for providing the point to point radio inter-
7 -cell link.

1 ~~35~~ 35. A base station as defined in claim ~~32~~ 34, wherein said cell is sub-divided into
2 multiple sectors and said multi-services switch is equipped with a first radio interface card for
3 each sector.

1 ~~36~~ 34. A base station as defined in claim ~~33~~ 35 connected to an Asynchronous Transfer
2 Mode backbone for providing broadband wireless service to said NIUs.

1 ~~37~~ 35. A base station as defined in claim ~~34~~ 36 connected to a network manager for
2 receiving configuration parameters respecting said first and second radio interface cards.

1 ~~38~~ 36. A base station as defined in claim ~~35~~ 37 wherein said configuration parameters
2 include; operating frequencies, modulation rates, forward error correction values, and
3 transmission power levels.

1 ~~39~~ 37. A base station as defined in claim ~~33~~ 35 wherein said second interface card is
2 equipped to provide point to point, bi-directional radio communication with base stations in
3 neighboring cells over said radio inter-cell link.

1 ~~40~~ 38. A base station as defined in claim ~~37~~ 39 wherein said radio inter-cell link is in a
2 ring configuration.

1 ~~41~~ 39. A base station as defined in claim ~~37~~ 39 wherein said radio, inter-cell link is in a
2 mesh configuration.

1 ~~42~~ 40. A method of providing communications between base stations in a cellular,
2 wireless network having multiple cells, each of the multiple cells having a base station, the
3 method comprising providing a multi-services switch at each of the base stations, each
4 switch being equipped with a radio interface card for providing bi-directional communication
5 with other base stations in the network; providing a network manager in association with at
6 least one of the base stations for configuring the radio interface cards, and providing a